

REMARKS

Applicants respectfully request the Examiner to reconsider the present application in view of the foregoing amendments to the claims.

Status of the Claims

In the present Reply, claims 16 and 18 have been amended. Also, claims 2 and 3 were previously canceled without prejudice or disclaimer of the subject matter contained therein. Further, claims 5, 6, 10, 14, 15, 17, 19 and 20 are allowed (see paragraph 6 of the Office Action). Thus, claims 1 and 4-20 are pending in the present application.

No new matter has been added by way of these amendments because each amendment is merely editorial and minor in character. Further, these amendments are supported throughout the present specification. Since these are clarifying and not a narrowing amendments (e.g., so that claims 16 and 18 do not depend on canceled subject matter), Applicants in no way are conceding any limitations with respect to the interpretation of the claims under the Doctrine of Equivalents.

Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Issues under 35 U.S.C. § 112, Second Paragraph

Claims 16 and 18 stand rejected under 35 U.S.C. § 112, second paragraph, for improperly depending on canceled claims (see paragraphs 1-2 of the Office Action). As can be seen from

the clarifying amendments herein, Applicants respectfully request reconsideration and withdrawal of this rejection.

Issues Under 35 U.S.C. § 103(a)

Claims 1, 4, 9, 11-13, 16 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Daisei et al. '316 (JP 06 255 316 A) in view of JP '167 (JP 2003-1167; Bridgestone) (see paragraphs 3-4 of the Office Action).

Also, claims 7-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Daisei '316 and JP '167 in view of Sumitomo '637 (JP 11-245637 A) (see paragraph 5 of the Office Action).

Each of these rejections is respectfully traversed, and reconsideration and withdrawal thereof are respectfully requested based on the following.

Distinctions over the cited combinations of references

The Examiner states that *prima facie* cases of obviousness have been established. Applicants respectfully traverse and submit that not all requirements for *prima facie* cases of obviousness have been satisfied. Further, Applicants respectfully submit that one of ordinary skill in the art would not combine the cited references because an inoperable tire would be produced, or the intended functions of the cited reference(s) would be destroyed. The discussion below focuses on the key features in the cited references, followed by Applicants' comments with respect to the outstanding rejections.

(i) The tire of Daisei '316

The tire of Daisei '316 has a chamfering part provided in the outer side edge of the block in the tire axial direction which is directed outward of a vehicle.

Such characteristics of the Daisei '316 tire contributes to uniform the ground contacting pressure of the block at the cornering of the vehicle, or to suppress the floating up of the tire surface from the road surface, which tends to occur in the inner side edge of the block which is directed inward of a vehicle. This increases the ground contacting area. As the result of the Daisei '316 tire, the maximum value of the cornering force is increased and the steering stability is improved.

Further, it is required for the tire of Daisei '316 that the surface of the notch is grounded when the vehicle is cornering. The angle of the surface of the notch is required to be very low, such as around 2 to 4 degrees as may be calculated from dimensions of the block indicated in paragraph 16, so that the surface of the notch will be grounded.

Therefore, Applicants respectfully submit that one of skill in the art would understand the essential features of Daisei '316 and would not be motivated in varying such essential features. Those Daisei '316 features include the outer side edge of the block in the tire axial direction and angle of the surface of the notch is required to be very low.

(ii) The JP '617 tire

The tire of JP '617 has a chamfer with smooth convex surface formed in the heel edge of the block in the circumferential direction. This is already different from the Daisei '316 tire

which has a chamfering part provided in the outer side edge of the block in the tire axial direction.

With such characteristics, it is possible for the tire of JP '617 to catch the road surface smoothly at the heel edge of the block in the tire circumferential direction thereof, which contributes to the smooth running of the vehicle at the straight running.

As a result of the chamfer in JP '617, the wear at the heel edge of the block and the toe edge of the block in the tire circumferential direction is balanced, so that the heel and toe wear can be controlled.

Therefore, in order to make the rolling of the tire on the road surface smooth, it is necessary to form a chamfer with smooth convex surface in the heel edge of the block in the circumferential direction.

Additionally, since the notch surface is formed with the smooth convex curve, an angle X (also shown in the JP '617 Abstract) formed between the surface and the tangential line changes in accordance with the position of contact. According to Fig. 1 of JP '617, the angle X changes in the range of 0 to 60 degrees.

(iii) Differences between the primary and secondary references

Given the disclosure in Daisei '316 and JP '617, one of skill in the art would understand that there are essential and key differences between the two tires. The two cited references are different with respect to at least the following points:

a. Position of the chamfering portion:

In the tire of Daisei '316, the notch is formed in the outside edge of the block in the tire axial direction, which is directed outward of a vehicle.

In the tire of JP '617, the notch is formed in the heel edge of the block in the tire circumferential direction.

Thus, there are differences in the position of the notch, wherein the skilled artisan would understand that the different positions affect the characteristics or properties of the tire.

b. Shape of the surface of the notch

In the tire of Daisei '316, the surface of the notch is flat.

In the tire of JP '617, the surface of the notch is convex.

Again, one of ordinary skill in the art would understand that the different notch shapes affect the characteristics of the tire.

c. Angle of the surface of the notch

In the tire of Daisei '316, the surface of the notch is required to be in contact with the road surface at the cornering of the vehicle. Therefore, the angle of the surface of the flat notch is formed at very small angles (e.g., between 2 to 4 degrees) to meet the objective of being in contact with the road surface upon cornering of the vehicle.

In contrast, the tire of JP '617 has a convex surface of the notch. This means that the angle of the surface of the notch is not constant. Instead, as disclosed in JP ' 617, the tangential angle X changes in the range of from 0 to 90 degrees.

Once again, one of ordinary skill in the art would understand that the different angles in the notch surfaces affect the characteristics of the tire.

d. Objectives and goals

An object of the tire of Daisei '316 is to increase the cornering force at the corner of the vehicle.

On the other hand, an object of the tire of JP '617 is to control heel and toe wear. JP '617 wants to balance the wear at the heel edge of the block and the toe edge of the block in the tire circumferential direction.

Given such disclosures, one of ordinary skill in the art would clearly understand that the different chamfers have different objectives to meet.

(iv) Improper combination of Daisei '316 and JP '617

Applicants respectfully submit that Daisei '316 is improperly combined with JP '617 to form the instant rejections.

As explained above, the tires of Daisei '316 and JP '617 are different in the above-mentioned points a-d. Such differences are at the very least:

- differences in the notch position (directed outward of a vehicle in outside edge of the block in the tire axial direction in Daisei '316 v. tire circumferential direction in the heel edge of the block in JP '617);
- a flat notch surface in Daisei '316 versus a convex shape in JP '617;

- the angle of the surface of the flat notch is formed at very small angles in Daisei '316 (to be in contact with the road surface upon cornering of the vehicle) versus a convex surface of the notch that does not have a constant angle of the surface of the notch in JP '617 (with tangential angle X); and
- objective of increasing cornering force at the corner of the vehicle in Daisei '316 v. objective of controlling heel and toe wear in JP '617 (balance the wear at the heel edge of the block and the toe edge of the block in the tire circumferential direction).

Therefore, one of ordinary skill in the art would not be motivated and/or reasonably expect to be successful in combining the cited references in order to achieve what is instantly claimed. *See In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991); *see also In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316-17 (Fed. Cir. 2000); *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Instead, the skilled artisan would notice such differences like the use of different notches of the chamfer to achieve different goals, and thus the requisite motivation and/or reasonable expectation of success is lacking.

Also, the mere fact that disclosures can be combined does not make the combination obvious unless the art also contains something to suggest the desirability of the combination. *See, In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984) and *In re Imperato*, 179 U.S.P.Q. 730, 732 (CCPA 1973). That is not the case here given the differences in the tires of the cited references. The skilled artisan would lack the desirability to modify these references.

Applicants further note that "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." *In re Napier*, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782,

1784 (Fed. Cir. 1995). Because the skilled artisan would notice such differences like the different positions and shapes of the notches of the chamfer block, there is no suggestion or teaching in the cited references to achieve the present invention. Thus, the requisite motivation is lacking given the disclosure in Daisei '316 and that in JP '617.

Applicants add that "Obviousness requires one of ordinary skill in the art have a reasonable expectation of success as to the invention—'obvious to try' and 'absolute predictability' are incorrect standards." *Velandier v. Garner*, 68, USPQ2d 1769, 1784 (Fed. Cir. 2003) (citing *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673 (Fed. Cir. 1988)). Here, the Examiner is using an improper obvious to try rationale in order to achieve the present invention given the conclusions drawn in the Office Action in the paragraph bridging pages 3-4 and in the paragraph bridging pages 4-5. The requisite reasonable expectation of success is thus lacking.

Additionally, Applicants respectfully traverse the conclusions in the Office Action in the sentence regarding what is "common and everyday occurrence" in the art (in paragraphs 4 and 5) since such reasoning does not take into account whatsoever the specific technical problems which are clearly stated in the present specification (see pages 1-2). Second, considering the problem to be solved in the Examiner's terms implicitly includes a direction to the solution to the problem. This itself is unreasonable because the cited references ought to be considered without the benefit of hindsight reconstruction. In the present circumstances, Applicants submit that it is much more appropriate to consider the problems to be solved as that phrased at pages 1-2 of Applicants' specification.

Applicants thus submit that an impermissible level of hindsight reconstruction is being used to form the instant rejections. In this regard, the Federal Circuit has stated: "It is wrong to

use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.” *Orthopedic Equip. Co., Inc. et al. v. United States*, 217 U.S.P.Q. 193, 199 (Fed. Cir. 1983).

Finally, Applicants submit that even if the skilled artisan did combine the disclosures of Daisei ‘316 and JP ‘617, an inoperable device would be produced or, alternatively, either one of the cited references would have its intended function destroyed. As the Federal Circuit has held: “If references taken in combination would produce a ‘seemingly inoperative device,’ we have held that such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness.” See *McGinley v. Franklin Sports Inc.*, 60 USPQ2d 1001, 1010 (CAFC 2001) (citing *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969) (references teach away from combination if combination produces seemingly inoperative device) and *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away)). Here, the Office Action states that the skilled artisan would use the notch or angle of the notch in one reference in order to modify the other reference’s notch. However, such a conclusion would produce a seemingly inoperable device given how, e.g., the smooth notch with the convex curve that controls heel and toe wear in JP ‘617 would have to be taken away or destroyed. The same is true with regard to the Daisei ‘316 notch.

Applicants further note that the claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose. See M.P.E.P. §§ 2143.01, 2145(III). The asserted combination of references would destroy at the very least the goal(s) of either reference (e.g., increase cornering force at the corner of the

vehicle in Daisei '316 due to the use of a low angle, flat notch as the chamfering part in the outer side edge of the block). Thus, the instant rejection in view of Daisei '316 and JP '617 is improper.

Accordingly, Applicants respectfully submit that *prima facie* cases of obviousness have not been established under *In re Vaeck*, *Imperato*, *Napier*, *McGinley*, *Orthopedic Equip.*, *In re Gordon* and/or *Velandar*. Therefore, reconsideration and withdrawal of these rejections are respectfully requested.

Distinctions over Daisei '316, JP '167 and Sumitomo '637

With regard to the rejection of claims in view of the combination of Daisei '316, JP '167 and Sumitomo '637, Applicants herein incorporate by reference the above comments. Claims 7 and 8 ultimately depend on claim 1. Adding the disclosure in the Sumitomo '637 does not take away how Daisei '316 and JP '167 are improperly combined. For instance, because one of ordinary skill in the art would not combine the cited Daisei '316 and JP '167 references because an inoperable tire would be produced, or the intended functions of the reference(s) would be destroyed, adding Sumitomo '637 would not make such a combination as proper.

Thus, Applicants respectfully submit that *prima facie* cases of obviousness have not been established under *In re Vaeck*, *Imperato*, *Napier*, *McGinley*, *Orthopedic Equip.*, *In re Gordon* and/or *Velandar*. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

Conclusion

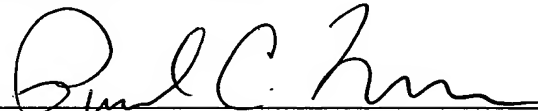
A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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